

December 1 Property Owner's Study Committee presentation by DOI:

Factors in Rate and Premium Setting.

Rate is what the Commissioner sets. Premium is what the companies actually charge the property owner.

Chart on what factors go into premium.

Pie chart on what factors go into rate.

Territories

At the same time as the last Homeowner's insurance filing in 2008, the Rate Bureau prepared and presented to the Department a revision of the rate territories in the state.

Chart of territories before the change.

Chart of territories after the change.

Modeling

The Rate Bureau first introduced data from modeling to the Department with a homeowner's rate filing in 1993. The Rate Bureau presents modeled losses for use in input into ratemaking to estimate hurricane losses. Modeling is not used for other losses.

The Department has never approved the Rate Bureau's model output explicitly and completely. Our actuaries try to temper the model, not to suppress them to an unsound level, but because the actuaries think they produce excessive rates. The statute requires rates that are neither inadequate nor excessive.

Rate making makes provisions for general losses, hurricane losses and what is called catastrophe wind losses...those are not hurricanes, but storms like tornadoes.

The model the Rate Bureau uses takes data from a data base called HURDAT, which includes storms from up and down the Atlantic Seaboard. The model uses that data to create a historical database of wind speeds, land falling locations, tracking patterns, etc. The modeling companies merge this database derived from historical hurricanes with engineering studies that attempt to measure the damage done by various wind speeds to different types of structures. Based on all of this information the modeling company creates a model for North Carolina that estimates expected annual insurance losses caused by hurricanes.

The model runs all the possibilities for storms involving North Carolina for 100,000 years. That is not looking at 100,000 years in the future to see what the storms will be. It means running the data over and over 100,000 times to see what could happen in any one given year.

The models look at all the probabilities and come up with estimates and average losses. The model the Rate Bureau uses says that over 100,000 scenarios there are 58,000 times that a hurricane will have some affect on NC.

A minority of these (about 18,000), are projected to hit the NC coast directly. Another 8,000 are projected to skirt the coast but come close enough to cause damage. The majority are projected to strike first in another state, and then track through NC with wind speeds of at least 40 mph. The modelers assume that lower wind speeds to no damage.

So, one run of the model may say that in one year no storms would hit NC, or that in one year three storms may start off the coast of Florida and move up the coast, bypass NC and then go to the Northeast. The next run may have a number of storms in the Atlantic Seaboard that year, but one would make landfall first North Carolina.

Numbers of HO companies actually writing in NC chart

Many companies write Homeowner's insurance in NC. Fewer write in the beach and coastal counties... Chart presented for reference.